How does TOLNet stay viable in the GEO-CAPE/TEMPO era?

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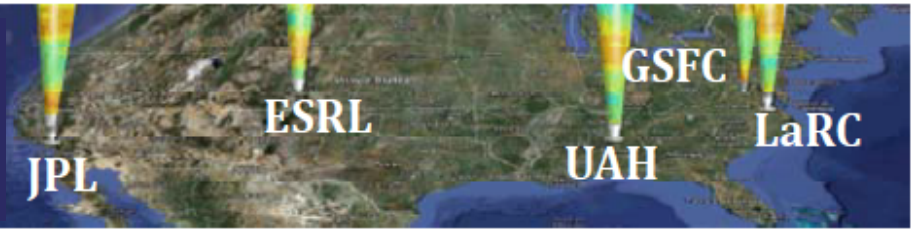
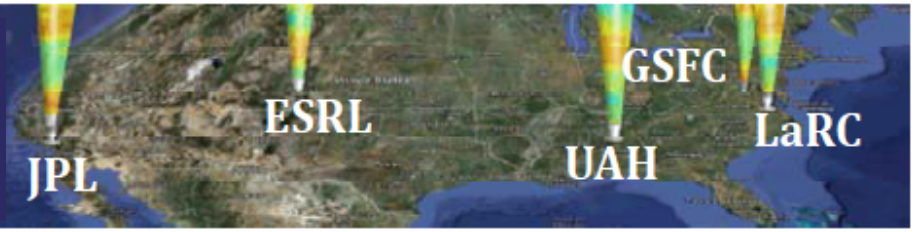
GEO CAPE Telecon yesterday



1) Last GEO CAPE workshop 31 August.
2) GC working groups have been focusing on OSSE studies, GSCIRI, and a/c simulator retrievals.
3) They are discussing their future in light of TEMPO and the 2nd Decadal Survey

Some Ideas



1) Provide the linkage between limited-vertical-resolution TEMPO observations and the atmospheric diurnal vertical processes that operate at much higher spatio-temporal resolutions especially in the PBL.
2) Carry the D-AQ mandate for relating columns to surface amounts forward to the point of understanding the processes resulting in those vertical distributions and properties.
3) Co-locate measurements with Pandora and other ground instruments. Establish vertical characteristics in the Pandora columns and profiles in anticipation of TEMPO validation by Pandora and TOLNet.
4) Provide observations to the modeling community for them to relate the TEMPO measurements to actual atmospheric processes and distributions (especially surface and PBL) and laminar features of ozone.
5) Provide validation of TEMPO diurnal observations. Use the TEMPO experiment mode to focus on a TOLNet site.
6) Address data assimilation and retrieval a-priori issues identifying the value of TOLNet to TEMPO retrievals and subsequent assimilation into AQ models.
7) Contribute to the NOAA AQ modeling mandate for providing AQ forecasting guidance through SPoRT R2O.
8) Consider the GOES-R proving-ground model for Early Adopters.
9) Provide data to state and local agencies to address Exceptional Events (transport, STE, ozone/smoke plumes) with stand-alone TOLNet data and in preparation for using TEMPO data for that purpose.
10) Measure intercontinental inflow at the west coast.
11) Measure intercontinental outflow at the east coast.
12) Measure sub-TEMPO distributions in urban, costal, and complex terrains.
13) Collaborate with Canada and Mexico to address their needs in the TEMPO era.